

TOTEM RRB OCTOBER 2011 :

M&O STATUS 2011

M&O BUDGET REQUEST 2012

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RRB M&O 2011 : Cat.A and Cat.B contributions by funding agencies [book-closing 31 Aug 2011]

31/Aug/2011

TOTEM Cat.A M&O 2011								
Budget T299572								
Balance Contrib. Cat.A = - 40 k		CERN	INFN	Finland	Estonia	Prague	US CWRU	KFKI
	Expected'11	106	198	48	18	26	26	18
	TotToBeAllocated	106	198	48	18	26	26	9 + 18
	Paid'11	106	198	48	18	26	4	0

TOTEM Cat.B M&O 2011								
Budget T299570 + Institutes								
Balance Contrib. Cat.B = + 0 k		CERN	INFN	Finland	Estonia	Prague	US CWRU	KFKI
	Expected'11	81	120	18	2	5	18	3
	TotToBeAllocated	81	120	18	2	5	18	3
	Paid'11	81	120	18	2	5	18	3

* **Hungary KFKI: money request via grant ongoing (9k outstanding from 2010).**
US CWRU: transactions under negotiation/preparation to complete payment.

M&O 2011: Cat.A expenditures summary (operation & consumables).**Expenditures and Balance book-closed at 31 Aug 2011.**

	B	C	D	E	F	G
2	TOTEM Category A M&O 2011					
3	Budget T299572 :			RRB	Out	Balance
	B	C	D	E	F	G
137	GRAND TOTAL			440	-293	147
138	Operation sub-items			354	-236	118
139	Consumables sub-items			86	-57	29
140						
141						
142	Carry-over from previous years					8
143						
144	Balance contributions '11 Cat.A					-40
145						
146	Credits - Debits					0
147						
148	TOTAL BALANCE CAT. A					115

M&O 2011: Cat.B expenditures summary (operation & consumables).**Expenditures and Balance book-closed at 31 Aug 2011.**

TOTEM Category B M&O 2011						
Budget T299570 + Institutes :			RRB	Out	Balance	
	GRAND TOTAL			247	-247	0
	Operation sub-items			83	-83	0
	Consumables sub-items			164	-164	0
	Carry-over from previous years					2
	Balance contributions '11 Cat.B					0
	TOTAL BALANCE CAT. B					2

M&O STATUS 2011 - SUMMARY**BOOK-CLOSING 31 Aug [FI Dpt.]**

- **TOTEM figures are consistent with the data presented by FI Dpt. within 1kCHF precision.**
- **Evolution of expenditures after August carefully traced.**
- **Projections to the end of the year indicate likely overspending due to excess of manpower cost for T1 firmware (1st year of T1 operation).**
- **Reimbursement for such extra-cost under negotiation.**

Notes:

The carry over from 2010 and the expenditures 2011 shown in the FI Dpt. figures coincide with TOTEM's 2010 book-closing and 2011 expenditures figures after taking into account the open commitments and the credits-debits from last year.

TOTEM RRB OCTOBER 2011 :

M&O STATUS 2011

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TOTEM M&O BUDGET REQUEST 2012

A total M&O budget envelope equal to 2011 is requested for the year 2012, according to the table of projections done with the SG for the years of LHC runs.

	Official 2011	Request 2012
A: TOT DETECTORS RELATED COSTS	142K	142K
A: TOT SECRETARIAT	44K	44K
A: TOT COMMUNICATIONS	3K	3K
A: TOT CORE COMPUTING	92K	92K
A: TOT ONLINE COMPUTING	96K	96K
A: TOT TESTBEAMS, CALIBRATION	20K	20K
A: TOT LABORATORY OPERATIONS	13K	13K
A: TOT GENERAL SERVICES	30K	30K
 <u>A: TOTAL =</u>	 <u>440K</u>	 <u>440K</u>

It is proposed to maintain const Cat.B contributions, as foreseen in the projections.

B: TOTAL = **247K**

Maintenance & Operation Cat. A:

M&O expenses that are shared by the entire collaboration.

The sharing is based on the proportion of scientific staff in the collaboration holding PhD or equivalent qualifications who are entitled to be named as authors of scientific publications of the collaboration.

2012:

CERN	INFN	Finland	Estonia	Prague	US CWRU	KFKI
13 / 53	24 / 53	6 / 53	2 / 53	3 / 53	3 / 53	2 / 53
24%	45%	11%	4%	6%	6%	4%
106	198	48	18	26	26	18

kCHF

Maintenance & Operation Cat. B:

M&O expenses that are borne by part of the collaboration, i.e. by single institutes or groups of institutes, and their Funding Agencies.

The headings in this category are defined with reference to the distribution of responsibilities amongst the various institutes for the construction of the detector.

The sharing is based on the proportions of the original investment.

SUB-DETECTOR	Responsibilities						
	CERN	INFN	Helsinki	Estonia	Prague	NSF	KFKI
Roman Pots							
Mechanics + Installation	85% = 25k				15% = 5k		
Si Detectors	73% = 12k					27% = 4k	
Electronics	50% = 16k			5% = 2k		35% = 11k	10% = 3k
T1 Detector							
CSC Detectors		100% = 12k					
Electronics		90% = 27k				10% = 3k	
Supports + Services	90% = 22k	10% = 3k					
T2 Detector							
GEM Detectors			100% = 12k				
Electronics		100% = 28k					
Supports + Services	50% = 6k		50% = 6k				
DAQ							
Read-out Column		100% = 50k					

CONCLUSIONS

- TOTEM has measured and published in 2011 the pp elastic differential cross-section, as well as the pp elastic, inelastic and total cross-section (with 3% precision) at 7 TeV.
- TOTEM is grateful to the relevant LHC teams and to the CMS collaboration for their continuous support.
- TOTEM is grateful to the RRB, Funding Agencies and Scrutiny Group, which helped the collaboration to produce these physics results, and is looking forward to their re-iterated support to continue its physics programme at the LHC (including single diffraction, double pomeron exchange, rho-measurement, luminosity-independent σ_{tot} , ...).